

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	0	(10/665,137).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/02/09 10:14
S2	0	(98/00661).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/02/09 10:14
S3	0	"10,665,137"	US-PGPUB; USPAT	OR	ON	2005/02/09 12:00
S4	0	98/00661	US-PGPUB; USPAT	OR	ON	2005/02/09 09:58
S5	0	"19652391"	US-PGPUB; USPAT	OR	ON	2005/02/09 11:55
S6	0	"10243956"	US-PGPUB; USPAT	OR	ON	2005/02/09 11:56
S7	0	"10243956.7"	US-PGPUB; USPAT	OR	ON	2005/02/09 10:00
S8	0	"10243956.7-13"	US-PGPUB; USPAT	OR	ON	2005/02/09 10:13
S9	0	"9906893"	US-PGPUB; USPAT	OR	ON	2005/02/09 11:57
S10	0	(10/665,137).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/02/09 11:57
S11	0	(98/00661).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/02/09 11:57
S12	1	"19652391"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 10:14
S13	3	"10243956"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 10:15

## EAST Search History

S14	4	"9906893"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 11:59
S15	12917	solenoid near (drive driver driving)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 10:57
S16	986	solenoid near (drive driver driving) and (MOSFET MOS FET IGBT traansistor)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 10:58
S17	2872	solenoid near (drive driver driving) and (MOSFET MOS FET IGBT transistor)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 10:58
S18	628	solenoid near (drive driver driving) and (MOSFET MOS FET IGBT transistor) and (pwm pulse near width)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 10:59
S19	47	solenoid near (drive driver driving) and (MOSFET MOS FET IGBT transistor) and (pwm pulse near width) and voltage near (protect protecting protection)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 12:50
S20	0	solenoid near (drive driver driving) and (MOSFET MOS FET IGBT transistor) and (pwm pulse near width) and voltage near (protect protecting protection) and "50" adj hz	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 11:16
S21	0	solenoid near (drive driver driving) and (MOSFET MOS FET IGBT transistor) and (pwm pulse near width) and voltage near (protect protecting protection) and "100" adj hz	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 11:17
S22	0	solenoid near (drive driver driving) and (MOSFET MOS FET IGBT transistor) and (pwm pulse near width) and voltage near (protect protecting protection) and "200" adj hz	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 11:17

## EAST Search History

S23	46	solenoid near (drive driver driving) and (MOSFET MOS FET IGBT transistor) and (pwm pulse near width) and voltage near (protect protecting protection) and frequency	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 11:27
S24	0	solenoid near (drive driver driving) and (pwm pulse near width) and voltage near (protect protecting protection) and frequency near hz	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 11:28
S25	10	solenoid near (drive driver driving) and (pwm pulse near width) and frequency near hz	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 11:35
S26	47	solenoid near (drive driver driving) and frequency near hz	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 11:54
S27	5	solenoid near (drive driver driving) same frequency near hz	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 11:43
S28	0	2004/0105209	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 11:54
S29	0	"19652391"	US-PGPUB; USPAT	OR	ON	2005/02/09 11:56
S30	0	"10243956"	US-PGPUB; USPAT	OR	ON	2005/02/09 11:55
S31	3	"10243956"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 11:56
S32	0	"19652391"	US-PGPUB; USPAT	OR	ON	2005/02/09 11:56
S33	1	"19652391"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 11:56

## EAST Search History

S34	3	"10243956"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 11:56
S35	4	"9906893"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 11:57
S36	0	(10/665,137).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/02/09 11:57
S37	0	(98/00661).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/02/09 11:57
S38	0	"10243956.7-13"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 12:00
S39	1	"10/665,137"	US-PGPUB; USPAT	OR	ON	2005/02/09 12:46
S40	13	"5,743,373"	US-PGPUB; USPAT	OR	ON	2005/02/09 12:47
S41	251	"5,734,373"	US-PGPUB; USPAT	OR	ON	2005/02/09 12:47
S42	29	solenoid near (drive driver driving) and (MOSFET MOS FET IGBT transistor) and (pwm pulse near width) and voltage near (protect protecting protection) and (car automotive)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 12:57
S43	18	solenoid near (drive driver driving) and voltage near (protect protecting protection) and (car automotive) and engine near control	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 14:03
S44	2	solenoid near (drive driver driving) near controller and (car automotive) and engine near (control controller)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 14:04

## EAST Search History

S45	2264	solenoid near (drive driver driving) near (control controlling controller)Z and (car automotive) and engine near (control controller)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 14:05
S46	24	solenoid near (drive driver driving) near (control controlling controller) and (car automotive) and engine near (control controller)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 15:16
S47	14	"5,743,373"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 14:08
S48	259	"5,734,373"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 14:08
S49	2	solenoid near valve near (driver driving drive) and frequency near Hz	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 15:18
S50	102	solenoid near valve and frequency near Hz	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 15:22
S51	7	solenoid near valve same frequency near Hz	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 15:25
S52	41	solenoid same frequency near Hz	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 15:26
S53	1	solenoid near frequency near Hz	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 15:26
S54	5	solenoid near3 frequency near Hz	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 15:30

## EAST Search History

S55	12	"4,851,959"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 15:30
S56	537	361/139	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/09 16:10
S57	1093	361/152	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/10 10:02
S58	883	361/91.1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/10 11:05
S59	1073	361/91.5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/02/10 12:18
S60	1	10/665,137	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/06/17 16:06
S61	0	99/06983	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/06/17 16:07
S62	4	"9906983"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/06/17 16:07
S63	11243	solenoid near (drive driver driving)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 16:12

## EAST Search History

S64	1141	solenoid near (drive driver driving) and (pwm or pulse near width)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 16:13
S65	49	solenoid near (drive driver driving) and (pwm or pulse near width) and voltage near (protect protecting protection)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 16:13
S66	0	solenoid near (drive driver driving) and (pwm or pulse near width) and voltage near (protect protecting protection) and pulse near mode	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 16:13
S67	11	solenoid near (drive driver driving) and (pwm or pulse near width) and voltage near (protect protecting protection) and high near frequency	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 16:16
S68	12	solenoid near (drive driver driving) and voltage near (protect protecting protection) and high near frequency	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 16:17
S69	67	solenoid near (drive driver driving) same high near frequency	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 17:05
S70	0	solenoid near (drive driver driving) near high near frequency	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 16:18
S71	4	solenoid near (drive driver driving) near3 high near frequency	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 16:25

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S72	8	solenoid near (drive driver driving) near5 high near frequency	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 16:30
S73	11	solenoid near (drive driver driving) near6 high near frequency	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 16:52
S74	44	("2399065"   "3153229"   "3324356"   "3671814"   "3754154"   "3846682"   "3932792"   "4150653"   "4368501"   "4434450"   "4450427"   "4479162"   "4578604"   "4608620"   "4638279"   "4656400"   "4659969"   "4665348"   "4700165"   "4710740"   "4793263"   "4868708"   "4910633"   "4978865"   "5053911"   "5093754"   "5128825"   "5264982"   "5267091"   "5359490"   "5381297"   "5406440"   "5442515"   "5442671"   "5467244"   "5539608"   "5546268"   "5602711"   "5621603"   "5673165"   "5724223").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/06/17 16:48
S75	15	"5,467,244"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 16:52
S76	17	"5,406,440"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 16:52
S77	0	solenoid near (drive driver driving) same holding near high near frequency	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 17:06
S78	0	solenoid near (drive driver driving) same holding near3 high near frequency	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 17:06

## EAST Search History

S79	3	solenoid near (drive driver driving) and holding near3 high near frequency	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 17:10
S80	3	solenoid near (drive driver driving) and holding near4 high near frequency	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 17:10
S81	3	solenoid near (drive driver driving) and holding near5 high near frequency	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 17:16
S82	3	solenoid near (drive driver driving) and holding near6 high near frequency	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 17:11
S83	52	solenoid near (drive driver driving) and (pulse pulses) near3 high near frequency	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 17:11
S84	3	solenoid near (drive driver driving) same (pulse pulses) near3 high near frequency	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 17:11
S85	21	solenoid near (drive driver driving) same holding and high near frequency	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/17 17:17
S86	13	"4,915,204"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/04/20 10:39

## EAST Search History

S87	1	10/665,137	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/04/20 12:00
S88	3	vale and pwm and free near wheel\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/04/20 12:01
S89	136	valve and pwm and free near wheel\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/04/20 14:23
S90	5	"6,256,185"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/04/20 14:24